

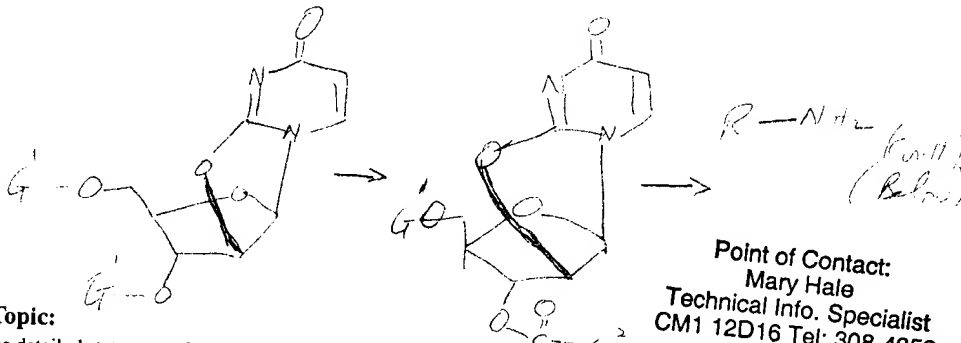
SEARCH REQUEST FORM

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Examiner # (Mandatory): L. E. Crane Requester's Full Name: sameArt Unit 1622 Location (Bldg/Room#): 8D-14 Phone (circle 305 306 308) 4639Serial Number: 09092,167 Results Format Preferred (circle): PAPER DISK E-MAILTitle of Invention See copy of claims attached And particularly copies ofInventors (please provide full names): Figures attachedEarliest Priority Date: 11/13/98

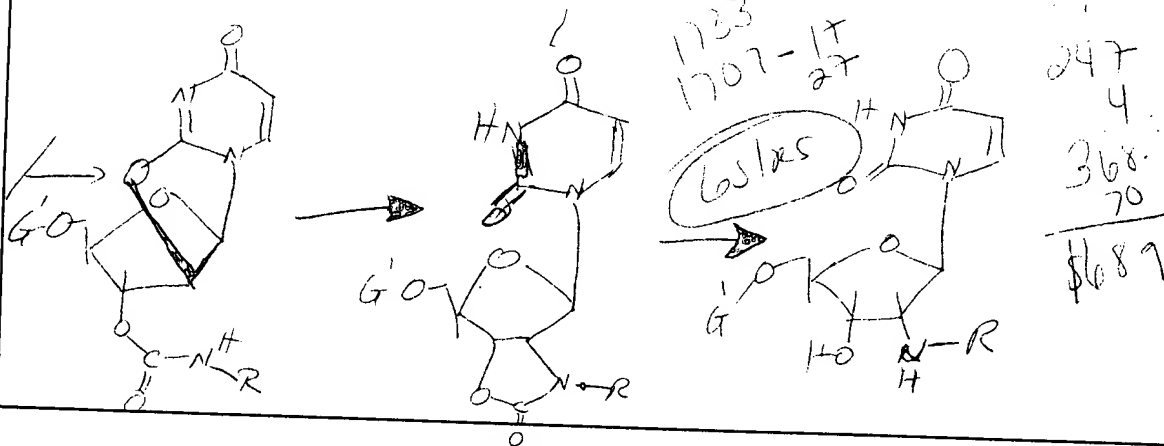
Keywords (include any known synonyms registry numbers, explanation of initialisms):

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Please write detailed statement of the search topic, and the concept of the invention. Describe as specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples of relevant citations, authors, etc., if known. You may include a copy of the abstract and the broadcast or most relevant claim(s).



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CLAIMS

We claim:

1. A method for making a modified nucleoside comprising a covalently attached signalling moiety or signalling moiety precursor, said method comprising:

- a) adding an anhydro-nucleoside and a signalling moiety or signalling moiety precursor comprising a primary amine in the presence of an activation agent to form an activated anhydro-nucleoside;
- b) treating said activated anhydro-nucleoside with a cyclization agent to form a cyclized intermediate; and
- c) treating said cyclized intermediate with a base to form said modified nucleoside.

2. A method according to claim 1 further comprising adding a phosphoramidite group to said modified nucleoside.

3. A method according to claim 2 further comprising incorporating said phosphoramidite modified nucleoside into a growing nucleic acid.

4. A method according to claim 1 wherein said nucleoside is a naturally occurring nucleoside.

5. A method according to claim 1 wherein said nucleoside is a nucleoside analog.

6. A method according to claim 1 wherein said activating agent is carbonyldimidazole.

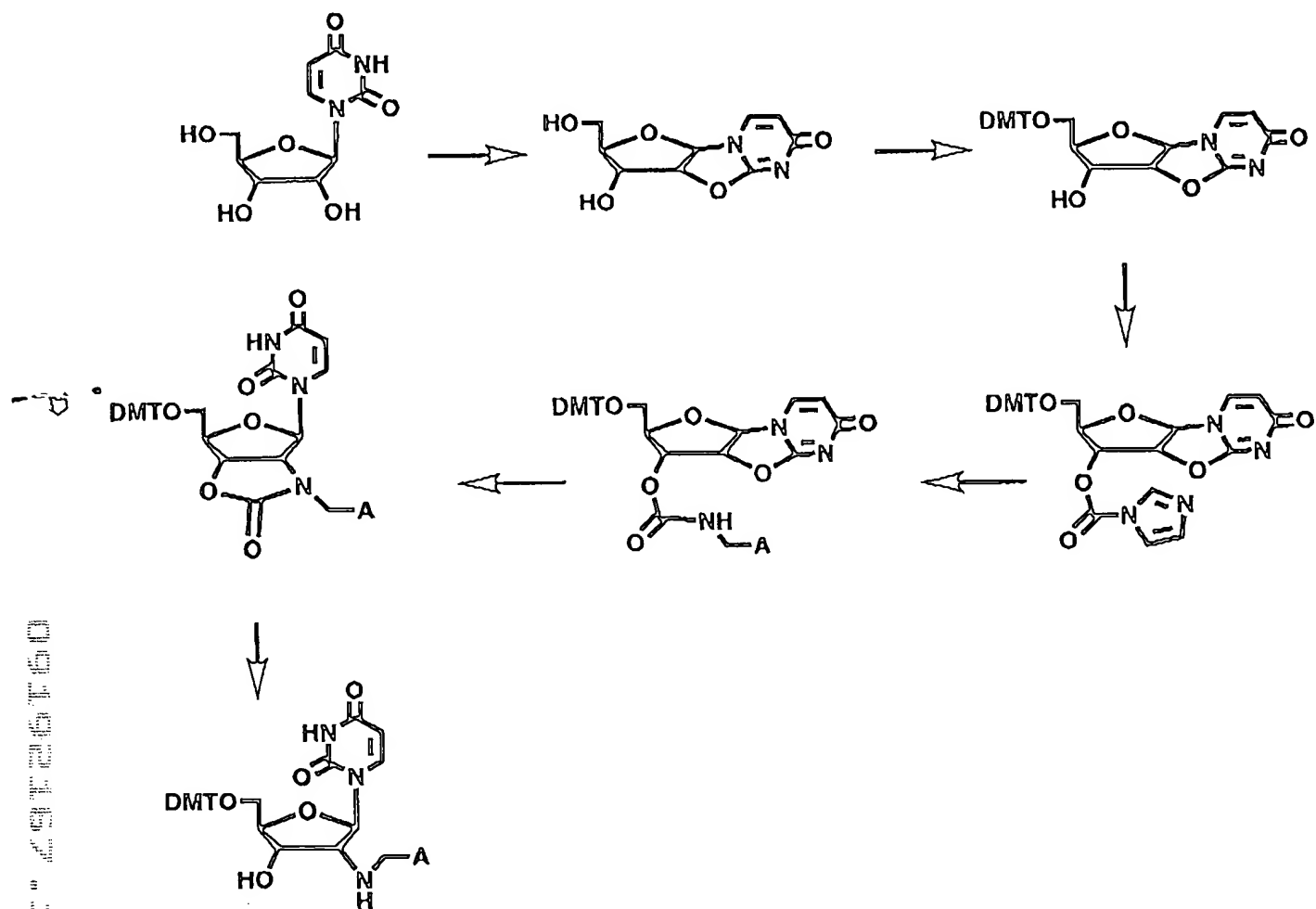
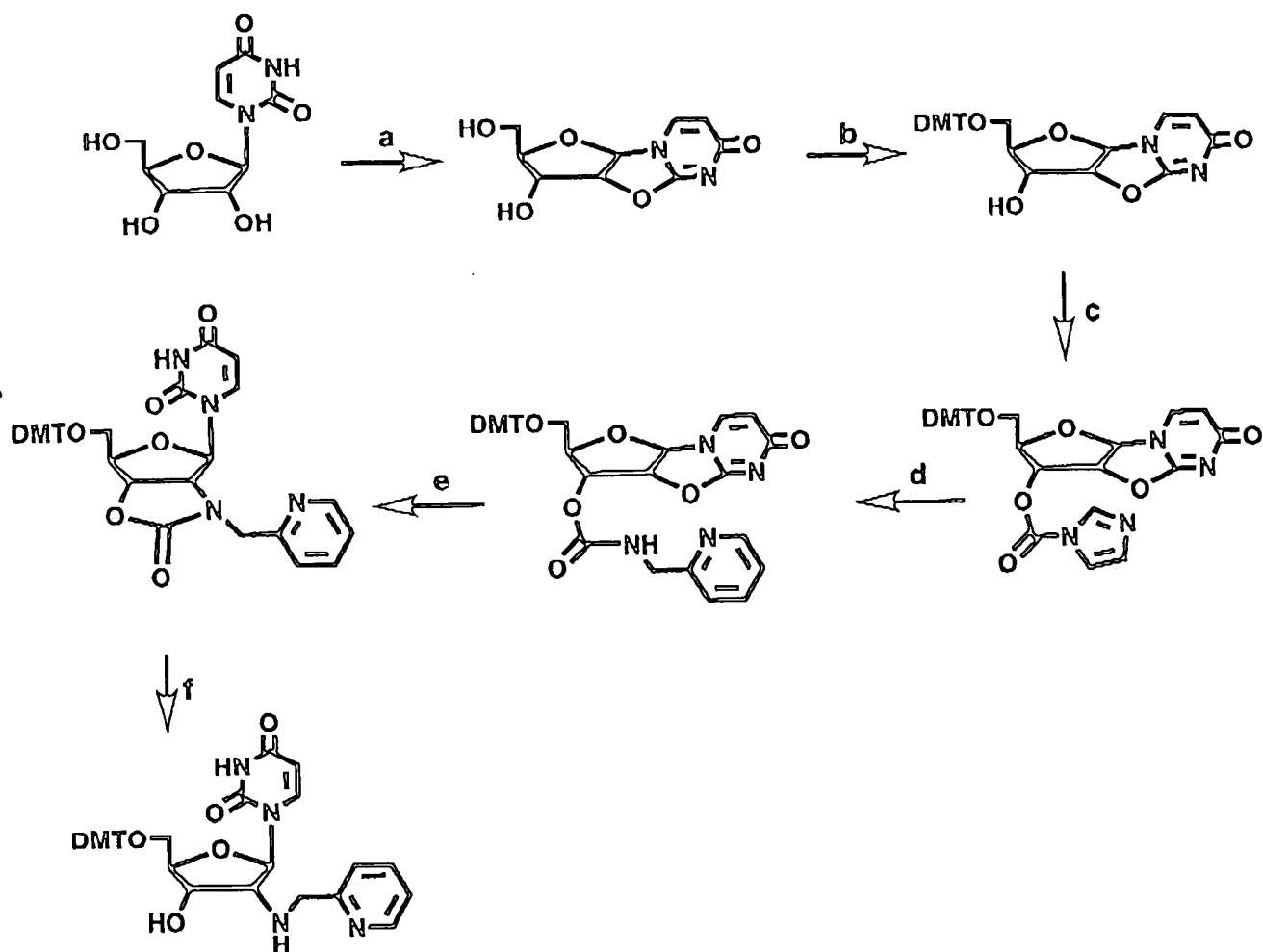


Fig 1

TABLE 1		TABLE 2		TABLE 3		TABLE 4		TABLE 5		TABLE 6		TABLE 7		TABLE 8		TABLE 9		TABLE 10		TABLE 11		TABLE 12		TABLE 13		TABLE 14		TABLE 15		TABLE 16		TABLE 17		TABLE 18		TABLE 19		TABLE 20		TABLE 21		TABLE 22		TABLE 23		TABLE 24		TABLE 25		TABLE 26		TABLE 27		TABLE 28		TABLE 29		TABLE 30		TABLE 31		TABLE 32		TABLE 33		TABLE 34		TABLE 35		TABLE 36		TABLE 37		TABLE 38		TABLE 39		TABLE 40		TABLE 41		TABLE 42		TABLE 43		TABLE 44		TABLE 45		TABLE 46		TABLE 47		TABLE 48		TABLE 49		TABLE 50		TABLE 51		TABLE 52		TABLE 53		TABLE 54		TABLE 55		TABLE 56		TABLE 57		TABLE 58		TABLE 59		TABLE 60		TABLE 61		TABLE 62		TABLE 63		TABLE 64		TABLE 65		TABLE 66		TABLE 67		TABLE 68		TABLE 69		TABLE 70		TABLE 71		TABLE 72		TABLE 73		TABLE 74		TABLE 75		TABLE 76		TABLE 77		TABLE 78		TABLE 79		TABLE 80		TABLE 81		TABLE 82		TABLE 83		TABLE 84		TABLE 85		TABLE 86		TABLE 87		TABLE 88		TABLE 89		TABLE 90		TABLE 91		TABLE 92		TABLE 93		TABLE 94		TABLE 95		TABLE 96		TABLE 97		TABLE 98		TABLE 99		TABLE 100	
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a) Diphenylcarbonate, DMF, 110° C, 8 hours; b) DMTCl, cat. DMAP, CH₂Cl₂, 25°C, 24 hrs.; c) 1,1'-Carbonylimidazole, CH₂Cl₂, 24 hrs.; d) 2-aminomethylpyridine, DIEA, CH₂Cl₂, 24 hrs.; e) DBU, THF, 48 hrs. 25°C; f) NaOH / MeOH / H₂O, 24 hr, 25°C.

Fig ②

J.D.

Synthesis of A Metallated Phosphoramidate

Fig 3

